

A Catalogue of the Birds in the Collection of the Bombay Natural History Society—3

Falconiformes

BY

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[Continued from Vol. 65 (2) : 430]

The first volume of the HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN was published (July 1968) after the manuscript of this part had been got ready for the press. An attempt has been made to incorporate in the text necessary references to the HANDBOOK. Measurements cited in the text are generally from the FAUNA; where such measurements are reproduced in the HANDBOOK, it has not been considered necessary to substitute a reference to the HANDBOOK. Measurements preceded by the letters IH are taken from the HANDBOOK.

The serial numbers in the HANDBOOK are identical with those in the SYNOPSIS, and so a separate reference was not found necessary.

As some of the buzzards and eagles are difficult to identify, even down to species, it is possible that in spite of every care some of the specimens in the collection are incorrectly identified. It is hoped that it will be possible at some future time to examine them once more along with additional material from the Indian Region and some reliably identified specimens for comparison.

This part deals with 846 specimens including all up to Register No. 23041.

124 *Elanus caeruleus vociferus* (Latham) (Coromandel Coast)
Black-winged Kite 5: 125

28 : 15 ♂♂ 11 ♀♀ 2 o? (9 juv.)

2 Chitral, N.W.F.P. ; 2 Ambala, 1 Bahawalpur, 1 Wazirabad, Punjab ; 1 Delhi ;
1 Gwalior ; 3 Gujerat ; 2 Nasik, 3 Bombay, 1 Thana, 1 Ratnagiri, Maharashtra ;
1 Coorg, Mysore ; 1 Orissa ; 1 Bulandshahr, U.P. ; 1 Nepal ; 3 Tirhut, Bihar ;
2 Imphal, Assam ; 1 *Henzada*, Burma.

The females are not very appreciably larger than the males but specimens from the neighbourhood of Bombay and southwards have slightly smaller wings and tails than those from the north. The few

larger specimens included among the southern birds may well be non-breeding migrants.

	Wing (IH 260-276)	Tail (IH 116-124)
7 northern ♂♂	267-282 av. 274	118-123 av. 121
2 southern ♂♂	251, 266	115, 116
6 northern ♀♀	273-281 av. 276.5	122-126 av. 124.6
3 southern ♀♀	262, 265, 273	116, 118, 121
3 northern ♂♂ juv.	251, 252, 273	123, 124, 132
2 southern ♂♂ juv.	240, 270	120, 129
3 northern ♀♀ juv.	262, 273, 276	128, 132, 133.

It appears very curious that some, both male and female, in juvenile plumage, in addition to having wings as large as adults, have even longer tails.

125 *Aviceda jerdoni jerdoni* (Blyth) (Malacca) Blyth's Baza 5: 174
1 ♀ Kurseong. Wing 338.

126 *Aviceda jerdoni ceylonensis* (Legge) (Near Kandy, Ceylon)
5: 175
nil.

127 *Aviceda leuphotes leuphotes* (Dumont) (Pondicherry) Indian
Blackcrested Baza 5: 171
1 o? Coonoor. Wing 230, wing tip 68.

128 *Aviceda leuphotes syama* (Hodgson) (Lower region of Nepal)
5: 1 ♀ 4 o? (1 fragmentary)
1 Bastar, M.P.; 1 Nepal; 2 Darjeeling; 1 *Upper Burma*.

With the material available, it is not possible to separate the races, so the specimens are listed in accordance with the distribution in SYNOPSIS and IND. HANDBOOK. Deignan (*Auk* 1948: 248) indicates that the northern birds *syama* (Nepal, Assam, north Burma, and parts of China) migrating south to Siam, Malaya and possibly Ceylon, have a longer wingtip (80-87) than the southern residents. In the present series the wingtip is 60 (Upper Burma), 72, 76, 85, 95 (Bastar, M.P.). The last relates to a very damaged wing and may be incorrect.

129 *Pernis ptilorhynchus orientalis* Taczanowski (Eastern Siberia)
Honey Buzzard 5: 168
1 o? *Chin Hills, Burma*.

This one unsexed specimen, a very ragged skin (No. 12712) obtained in November (wing 444), differs from all the others in the brown of the underparts extending on to and replacing the grey on the undersurface

of the tail. The specimen was sent to Dr. Amadon who thought it was of this race.

Orientalis was included in the FAUNA as a race of *apivorus*. In this specimen and in a ♂ *ruficollis* (No. 12708, Wazirabad, Punjab), the outer webs of the primaries are emarginated from the second to the fifth (and not the sixth as in the other *Pernis* available), a character of *apivorus* (Vaurie 1965 : 145). In the course of recent correspondence Dr. Amadon said: 'As to the wing emargination, I suspect that it varies'.

In IND. HANDBOOK, in addition to a general statement that it is an uncommon winter migrant to northern India, it is said that it has occurred as far south as Ceylon, and reference is made to a record in *Loris*. This is a mere quotation from 'Bird Club Notes' which reads: 'Specimen obtained at Mannas', with nothing to show how and by whom this difficult identification was made. More recently Phillips records one from the Maldives (*JBNHS* 60 : 569). Vaurie, 1962, *Amer. Mus. Novitates* 2111, p. 6, refers to specimens from Margherita, Assam, and Bengal.

130 *Pernis ptilorhyncus ruficollis* Lesson ("Patrie inconnue" = Bengal)
Honey Buzzard 5 : 167

24 : 10 ♂♂ 7 ♀♀ 7 o? 12 adults (underparts brown) ; 9 juvenile (underparts white with dark streaks) ; 1 all white below ; 2 barred.

2 Ambala, 1 Hissar, 1 Wazirabad, 1 Bahawalpur, Punjab ; 2 Radhanpur, N. Gujerat ; 2 Bhuj, Kutch ; 1 Chikalda, Berar ; 1 Thana, 1 Khandala, 1 Bombay, Maharashtra ; 1 Karwar, Mysore ; 1 Coonoor, 1 Ootacamund, 1 Palnis, Madras ; 1 Vizagapatnam, A.P. ; 1 Agra, 1 Shahjehanpur, U.P. ; 1 Bihar (?) ; 1 Calcutta ; 1 Godavari, Nepal ; 1 no data.

Only one of the specimens available is separable as *orientalis* and the wings, though larger than indicated in the FAUNA, are within the limits of this race in Vaurie (1965 : 149) :

10 ♂♂ 377-447 av. 402 (Vaurie 366-450 av. 401.3)*.

7 ♀♀ 386-425 av. 403 (Vaurie 387-432 av. 410).

* The range in the IND. HANDBOOK, 382-417, appears to be in error.

There is considerable variation in the plumage of apparently adult birds and it has been customary to suggest that the species is polymorphic, some being all brown below and others almost white. Stuart Baker stated that all *ruficollis* when fully adult assume an all-brown plumage. Kirke Swann (MONOGRAPH OF BIRDS OF PREY 2 : 313) also indicates no colour differences between the sexes. It is, however, noteworthy that only one of the eight all-brown (kite-like) birds (with broad black and grey bars on the tail) which have been sexed is marked a female. Again, excluding this specimen (No. 12718), all the other females are white below with streaks on the breast and with narrowly

barred tails. All the females have the pale bands on the tail more distinctly crossed by wavy lines, which are almost absent in the males.

The largest-winged (447) male, from Karwar, is a very pale (almost white) rufous below, while two others (one ♂, one unsexed) show brown barring on the breast which appears to be a stage towards the all-brown underparts, which latter together with the grey around the head I am inclined to accept as the plumage of the adult male.

131 *Milvus milvus milvus* (Linnaeus) (South Sweden) Kite
nil.

132 *Milvus migrans migrans* (Boddaert) (France) 5 : 121
4 ♀♀

1 *Sheikh Saad*, 1 *Shaiba*, 1? *Mesopotamia*; 1 Kalat, Baluchistan.

The races of this species have been difficult to determine. The Mesopotamian birds were identified as of the nominate form by Ticehurst but in the summary of the specimens examined by him (*JBNHS* 28 : 425) the sexes differ from those on the present labels. Only No. 12465 from Kalat has a distinctly whitish head with black streaks. It has no white under the primaries, as in *lineatus* :

Wing 443, 458, 461, 463.

133 *Milvus (migrans) govinda* Sykes (Dukhun) Pariah Kite 5 : 121
19 : 5 ♂♂ 7 ♀♀ 7 o? (2 pull., 1 chick).

1 Palanpur, 1 Gir, 1 Bhavnagar, Gujerat; 1 Panchgani, 10 Bombay, Maharashtra;
1 Nilambur, Kerala; 1 Vizagapatnam, A.P.; 1 Jainagar, 1 Baghowni, Bihar;
1 Mussoorie, U.P.

There are many differences in colour between the specimens and it is possible that a well-collected series would explain some of them. The sexes do not show much difference in size :

Wing	4 ♂♂	420-446	av. 436	6 ♀♀	419-444	av. 431.5
Tail		233-262	av. 249		243-276	av. 249

IND. HANDBOOK refers to its occurrence in the Andaman Islands, but I have already (*JBNHS* 61 : 506) indicated that this is probably based on birds carried down by boat.

134 *Milvus (migrans) lineatus* (Gray) (China) Blackeared Kite 5 : 134
9 : 6 ♂♂ 2 ♀♀ 1 o?

1 *Yarkand*; 1 Chitral; 1 Simla; 1 Srinagar; 1 Bhayander, Bombay, 1 Lonavla,
1 Bhimashanker, Poona, Maharashtra; 1 Annandapuram, Shimoga, Mysore;
1 *Burma*.

Wing 6 ♂♂ 471-507 av. 487 2 ♀♀ 471, 477.

The two females from Srinagar (No. 12470) and Simla (No. 19049) are smaller than the males and may well be *govinda* as originally marked

on the labels. They are included here for the white patches under the wings. The specimen from Shimoga, Mysore, is the southernmost record of this species (*JBNHS* 65 : 774)

135 *Haliastur indus indus* (Boddaert) (Pondicherry) Brahminy Kite 5 : 118

17 : 4 ♂♂ 10 ♀♀ 3 o ? (8 in adult plumage).

2 Punjab ; 1 Kronthal ; 1 Bhavnagar, 1 Baroda, Gujerat ; 2 Bombay, 1 Panvel, Maharashtra ; 3 North Kanara ; 2 Kerala ; 1 Tiruchirapalli, Madras ; 1 Nepal ; 1 Siliguri ; 1 Calcutta.

The white feathers of the head, nape, and breast have black shaft streaks. In 7 adults obtained between 16 January and 25 May, the feathers of the nape are worn at the tips, leaving bare shaft tips in some cases almost an inch in length ; in three others collected in August, September, and November these feathers are normal :

Wing 2 ♂♂ 373, 380 (IH 359-394) 6 ♀♀ 379, 390, 397, 403, 404, 408 (IH 379-403)

These notes and measurements include two specimens which are not in the collection.

EL *Accipiter gentilis gentilis* (Linnaeus) (Dalscarlian Alps) Goshawk 5 : 145

1 ♀ *Pottenstein, Germany.*

136 *Accipiter gentilis schvedowi* (Menzbier) (Transbaikalia) 5 : 146
nil.

137 *Accipiter badius cenchroides* (Severtzov) (Lower Syr-Darya ; Russian Turkestan) Central Asian Shikra 5 : 150

4 : 1 ♂ juv., 3 ♀♀

1 *Shiraz, Iran* (wing 201) ; 1 *Ziarat, Persian Baluchistan* (190) ; 2 Bombay (220, 223).

The two females from Bombay (Nos. 12630 and 12645) were taken in October and November and, together with the one from Ziarat, are separable from the others by the paleness of the upper parts. The first two were named *cenchroides* by H. G. Deignan when he examined them in Bombay many years ago. The juvenile male from Shiraz is no different from others (*dussumieri*) from India. Though *cenchroides* is accepted as larger than *dussumieri* the wing measurements overlap to a great extent and, except for the above specimens, I am listing all the specimens from Indian limits as *dussumieri*. The two specimens from Bombay extend the known range of this race.

With a series of breeding birds, it may be possible to determine two separate groups but I am unable to do anything with the present series.

138 *Accipiter badius dussumieri* (Temminck) (Bengal) Shikra 5 : 149

69 : 34 ♂♂ 30 ♀♀ 5 o ?

1 Kalat, Baluchistan ; 1 Wana, 1 Bhagat State, N.W.F.P. ; 3 Simla, 1 Pathankot, 1 Jagadhri, 1 Patiala, 2 Ambala, 1 Jullunder, 2 Chandigarh, 1 Chamba ;

1 Wazirabad ; 1 Delhi ; 1 Jodhpur, Rajasthan ; 2 Kutch, 1 Jasdan, 7 Bhavnagar, 1 Anand, 1 Cambay, 1 Palanpur, Gujerat ; 1 Melghat, Berar ; 1 Saugor ; 9 Bombay, 1 Kihim, Kolaba, 2 Khandala, 1 Ratnagiri, 2 Satara, 1 Nagpur, Maharashtra ; 2 North Kanara, Mysore ; 1 Palni ; 1 Jamestown, Kanyakumari, 1 Madras ; 1 Kumili, 1 Edanad, Travancore, Kerala ; 2 Cuddapah, A.P. ; 2 Bastar, M.P. ; 1 Berbera, 1 Nayagarh State, Orissa ; 1 Tirhut, Bihar ; 1 Meerut, 2 Kanpur, 1 Bulandshahr, U.P. ; 1 Goalpara, 1 South Sylhet, Assam.

As indicated under the last species it is not possible to isolate any size or colour in this large series. The wings of two groups north and south of Bombay measure :

	Males	Females
Bombay and southwards	(6) 182-204 av. 187	(10) 187-214 av. 202
Northern	(19) 173-216 av. 187	(9) 191-219 av. 211

The seven males (4 north, 3 south) in adult plumage (grey above) have wings 174-186 av. 183.

The specimens from Assam and southern India agree with these rather than *poliopsis* (Burma) and nominate *badius* (Ceylon) respectively.

139. *Accipiter badius badius* (Gmelin) (Ceylon) 5 : 147
1 ♀ Anigalli, Ceylon, wing 202.

This differs from the other shikras from peninsular India in having the brown barring on the underparts as dark as in those from Burma. Two females in similar phases from Kumili, High Range, Kerala, and the Palnis are better grouped with *dussumieri* though a third from Jamestown, Kanyakumari District, is almost as dark as the Ceylon bird. A male from Edanad, Travancore, also agrees with *dussumieri*.

140 *Accipiter badius poliopsis* (Hume) (Northern Pegu) 5 : 151
7 : 2 ♂♂ 4 ♀♀ 1 o ?

1 Pyawbe, 1 Seinban, Mandalay ; 1 Thani Chaung, Sandoway, 1 Ngaphaw, Prome ; 1 Toungoo, 1 Mindon, Thayetmyo ; 1 (col. J. P. Cook 1913) ? Burma.

Wing	♂♂	♀♀
2 juveniles	220 *	204 *
2 adults, brown above with grey heads	—	216, 225
2 adults, all grey above	203	196 *

The three birds marked with an asterisk appear to be wrongly sexed. In the juveniles the tail has only four dark bands ; in the others the barring on the underparts is a deeper rufous and the sides of the head are concolorous with the crown instead of being tinged with brown or ashy as in the other races. As indicated under 138, the two specimens from Assam agree with *dussumieri* rather than this form.

141 *Accipiter badius butleri* (Gurney) (Car Nicobar) 5 : 151
nil.

142 *Accipiter badius obsoletus* (Richmond) (Katchal) 5 : 152

1 juv. ♂ Camorta, Central Nicobars. Wing 166 (192), tail 128 (157), 5th primary longest.

This specimen has more of a rufous wash both above and below than any other in similar plumage, and resembles a juvenile of *A. virgatus*. The irides were noted by the collector as orange-yellow though the type specimen had them crimson. The subspecific identification is based on the proximity of the type locality of this race.

143 *Accipiter soloensis* (Horsfield) (Java) Horsfield's Goshawk 5 : 153
nil.

The Andaman Islands are included in the range of this species (IND. HANDBOOK) but I have been unable to trace the evidence.

144 *Accipiter trivirgatus indicus* (Hodgson) (Nepal) Crested Goshawk 5 : 155

4 : 2 ♀♀ 2 ♂ ?

1 Palkonda, 1 Lamasinghi, 1 Vizagapatam District ; 1 (col. C. M. Inglis) ? Bihar
2 ♀♀ wing 255, 267 (238-267) tail 202, 204.
2 ♂ ? 217, 222 (♂ 224-237) 172-179.

145 *Accipiter trivirgatus peninsulae* Koelz (Londa, N. Kanara)

10 : 6 ♂♂ 4 ♀♀ (1 ♀ pull.).

1 Anantgiri, Vizagapatam ; 1 Devonellikottah (?), 8 Palnis.

Though the sexes of this species are said to be similar in the FAUNA, Mayr (*Am. Mus. Novit.* 1415, 1949) states that including the juvenile (in which the sexes are similar) there are three distinct plumages. All the specimens do not appear to be correctly sexed but, accepting birds with dark grey heads contrasting sharply with the rest of the upper parts as males, the specimens measure :

	Wing		Tail
6 ♂♂	195-220 av. 207		155-172 av. 165
3 ♀♀	220-232 av. 226		174-182 av. 177

The male from Anantgiri was named *indicus* by Whistler (*JBNHS* 38 : 434) before *peninsulae* was described. It has a slightly paler and greyer head and a paler and more unbroken patch of earthy brown on the upper breast than the series from the Palnis but, as Mayr (loc. cit.) states that *indicus* is darker than *peninsulae*, I prefer to leave this here. A fresh series from the eastern Ghats around Vizagapatam would be of interest.

Incidentally, the northern limit of this race is North Kanara and not Khandesh, an error in the FAUNA which was corrected by Whistler (*JBNHS* 38 : 433) but was repeated in the SYNOPSIS and is now corrected in IND. HANDBOOK.

146 *Accipiter trivirgatus layardi* (Whistler & Kinnear) (Gillymally, Peak Forest, Ceylon)
nil.

EL *Accipiter nisus nisus*

4 ♀♀

3 Iraq, 1 South Persia.

Though this race is omitted from Indian literature, it may be worthwhile drawing attention to Vaurie (1965 : 168) who refers to its occurrence in Baluchistan. In series, they are darker than *nisosimilis* and measure :

Wing	236-242	av. 238.75
Tail	173-176	av. 173.75.

147 *Accipiter nisus nisosimilis* (Tickell) (Marcha, Borabhum) Sparrow-Hawk
5 : 156

19 : 10 ♂♂ 9 ♀♀ (5 imm. ♂♂).

1 Amara, 1 Sulaimaniyah, Iraq ; 1 Shiraz ; 2 Boya, 1 Chaman, Baluchistan ; 2 Chitral ; 1 Kutch ; 1 Cambay, 1 Rajpipla, 1 Surat Dangs, Gujerat ; 1 Belgaum, Mysore ; 1 Munchacholy Swamp (J. P. Cook 1891=South India ?) ; 2 Palni Hills, Madras ; 1 Meerut ; 2 Peking, China.

No. 22283 from the Palnis is very heavily frayed above and paler than *melaschistos*, though the 185 mm. tail suggests that race (q.v.).

148 *Accipiter nisus melaschistos* Hume [Interior of Himalayas. Restricted to Kotegarh (Simla Hills) N.W. Himalayas]
5 : 158

15 : 8 ♂♂ 7 ♀♀ (1 pull., 1 juv.)

12 Simla Hills ; 1 New Delhi ; 1 Wada, 1 Kalyan, Bombay.

When naming *nisosimilis*, Tickell (1833, *Journ. Asiat. Soc. Bengal* 2 : 571) mentioned no measurements and laid down the description of a single male obtained at Marcha, Borabhum. This form, however, is now accepted as slightly larger and paler than the European *nisus*. Hume's description of *melaschistos* is more exhaustive, but he compared his specimens with European birds, and made no reference to *nisosimilis*. His measurements of the wings and tails of the specimens examined by him exceed those determined by subsequent workers. An adult female is said to have a 221 mm. tail, while the largest available is 188 ; a young male wing is measured as 248 mm. against 216 in the largest and one can only assume that they were handled in a different manner.¹

The type locality of *melaschistos* has been accepted in recent literature (IND. HANDBOOK and Vaurie's PALEARCTIC BIRDS 1965) as the

¹ After this went to the press, I received specimens from the Smithsonian Institution, said to be *melaschistos* including two females collected at Szechwan, China, Mopin-Tibetan border, and Tinjuire, E. Nepal, which are almost black above and have longer tails, 204 and 195 respectively. They appear appreciably different from all the others available in Bombay, and agree more closely with the original description. This matter will require further examination, as the series from the Simla Hills appears to be neither *melaschistos* nor *nisosimilis*. The subspecific grouping under serials 147 and 148 may, therefore, please be ignored. - H.A.

interior of the Himalayas'. In the first description (MY SCRAP BOOK ON INDIAN OLOGY AND ORNITHOLOGY OR ROUGH NOTES, 1869 : 128) these words are used in a general manner but Hume specifically stated that the only two specimens which he obtained were near Simla. In the FAUNA (1929, 5 : 158) Stuart Baker refers to Hume's second note in *Ibis* for 1869 (which is not available to me) and gives the type locality as 'Kotegarh (Simla Hills—H.A.), N.W. India'. In spite of the fact that Hume (loc. cit. p. 124) refers to a Capt. Thompson assuring him that 'two pairs of the true Sparrow Hawk breed yearly in Anandale, just below Simla' it would be advisable, as supported by the facts detailed below to accept the restriction of the type locality of *melaschistos* to Kotegarh, Simla Hills.

The collection includes 10 birds (7 ♂♂ 3 ♀♀) from the Simla Hills and the adult males can be separated from the other (*nisosimilis*) males by their bright rufous under-parts in which the bars across the breast are 'fused' and scarcely visible. The upper-parts are much darker, almost slaty black.

The three races measure :

	Males	
Wing		Tail
<i>nisus</i> (BR. HANDBOOK 190-205)		(BR. HANDBOOK 135-154)
<i>nisosimilis</i> 197-213 av. 203 (204-216)		137-154 av. 146 (151-161)
<i>melaschistos</i> 201-216 av. 211 (212-219)		145-172 av. 159
	Females	
	Wing	Tail
<i>nisus</i> 236-242 (BR. HANDBOOK 230-240)		173-176 (BR. HANDBOOK 166-176)
<i>nisosimilis</i> 227-248 av. 240 (243-257)		171-184 av. 175 (183-207)
<i>melaschistos</i> 236-257 av. 245 (245-260)		180-188 av. 184

149 *Accipiter virgatus kashmiriensis* Whistler & Kinnear (Murree) Besra Sparrow-Hawk

5 : 4 ♂♂ 1 ♀ (2 ad. ♂♂, 1 ad. ♀, 2 juv. ♂♂).
3 Simla, 1 Ranikhet, 1 Koti State 7000'.

The two adult males are paler above than those of the next race.

Wing ♂♂ 164, 166 (IH 165-169) ; tails 124, 127 (IH 127.5-130).
Wing ♀ 201 (IH 196-207) ; tail 157 (IH 153-160).

150 *Accipiter virgatus affinis* Hodgson (Nepal) 5 : 161

2 ♂♂
1 Karuprayag, Garhwal ; 1 Nepal. Wings 162, 163 ; tails 125, 131.

151 *Accipiter virgatus besra* Jerdon (Soonda Jungles, south India) 5 : 159

6 : 2 ♂♂ 3 ♀♀ 1 ♂ ?
1 Bhavnagar, Gujerat ; 1 Salsette, Bombay ; 3 Palni Hills, Madras ; 1 no data.

The two males have wings 150, 150 and tails 113, 114. The ♀ from Bhavnagar (wing 185, tail 142) which was recorded as *besra* agrees in

size with the adult female (by plumage) from the Palnis, but it is a juvenile and much paler in colour and appears to be of a northern race.

152 *Accipiter virgatus gularis* (Temminck & Schlegel) (Japan) Eastern Sparrow-Hawk 5 : 162

4 : 2 ♂♂ 2 ♀♀ (2 juvenile).

2 Middle Andamans, 1 South Andaman ; 1 Camorta, Central Nicobar.

The pair from Middle Andamans (wing ♂ 150, ♀ 187) in adult plumage have a broad mesial stripe (*contra* IND. HANDBOOK), while the other two in juvenile plumage (South Andaman ♂ wing 159 and Camorta ♀ 185) have a fine mesial stripe. This difference in the width of the gular stripe does not show in the other races.

153¹ *Buteo rufinus rufinus* (Cretzschmar) (Upper Nubia etc.) 5 : 137 Longlegged Buzzard

26 : 11 ♂♂ 7 ♀♀ 8 o? 10 ad. with unbarred tails.

15 with brown tails, barred.

1 with brown unbarred tail.

1 *Amdia Barrage, Euphrates*, 1 *Sheik Saud, Mesopotamia*, 1 *Gumazgi, 51 miles west of Turbat*, 1 *South Persia, 2 Meirhum, Persian Gulf*; 1 Quetta, 1 Miranshah, Kohat Dist., N.W.F.P., 1 Shali Peak, Bhajja State, 1 Keonthal State, N.W. Himalayas, 1 Kashmir, 1 Rawalpindi; 1 Wazirabad, 1 Simla, 1 Bahawalpur Town, 1 Ambala, 1 Mooltan, Punjab; 1 Delhi; 1 Thar Parker, 1 Shah Hassan Manchar Lake, Sind; 1 Tilwara, Jodhpur, 1 Kharagodha, 1 Bhavnagar, Kathiawar; 1 Rajaputla, Chupriah; 1 Sarun, Bengal; 1 no data.

These specimens have all been listed under this species but without certainly identified material, it is not possible with the literature available to confirm or deny the identification. Apart from the differences in colour, the measurements of several specimens are either too large (5 ♂♂ Nos. 12588, 12598, 12600, 12603 and 12608. Wing 435-478 cf. ♂ 415-431 and ♀ 428-487 in FAUNA and Vaurie) or too small (2 ♂♂ Nos. 12594 and 12609, wing 390, 407, 2 ♀♀ Nos. 12605 and 19092, wing 405, 365).

154 *Buteo hemilasius* Temminck & Schlegel (Japan) Upland Buzzard 5 : 140

1 ♂ Tibet. Wing 477, tail 235 (Sp. No. 12613, Collected by F. M. Bailey and probably the basis of Kinnear's note, *JBNHS* 19 : 523). See also *JBNHS* 21 : 182 and *NIDIFICATION* 4 : 99.

This specimen was identified by Dr. Amadon.

155¹ *Buteo vulpinus vulpinus* (Gloger) (Africa) Desert Buzzard 5 : 142

4 : 2 ♂♂ 2 o? (Nos. 12610, 12611, 12612, 19065).

1 *Bandar-e-Gaz, Astrabad, Caspian Province*; 1 Simla; 1 Abor Country, Mishmi Hills; 1 col. by J.P. Cook in 1913=*Burma* (?) Wings 355, 370, 397, 430; tails 190, —, 207, 216.

¹ See footnote on p. 706 below.

156¹ *Buteo buteo burmanicus* Hume (Thayetmyo, Upper Pegu) Buzzard 5 : 143

nil.

157 *Butastur teesa* (Franklin) (Ganga-Narbudha) White-eyed Buzzard-Eagle 5 : 104

23 : 7 ♂♂ 14 ♀♀ 2 o? (3 imm. with streaked underparts including one with white head and no gular stripe).

1 *Qasrquand*, *Persian Baluchistan*; 1 *Khojdar*, *Persia*; 1 Rodkan, W. Kalwa, 1 Kilkaur, Baluchistan; 1 Jaswantpur, Rajputana; 1 Gir, 1 Patan, 1 Ajwa, 1 Cambay, 3 Bhavnagar; 2 Bombay, 3 Thana; 1 Raipur, Melghat, 1 Jabalpur; 2 Meerut, 1 Kanpur; 1 Narhar, Darbhanga, Bihar.

The measurements of wings and tails are slightly larger than in the FAUNA, with the birds from Madhya Pradesh and Uttar Pradesh appearing smaller than the others. There is no material from southern India for comparison :

	Wing	Tail
7 ♂♂	283-310 av. 297 (278-296)	161-180 av. 171 (151-169)
14 ♀♀	287-318 av. 297.5 (294-314)	151-176 av. 159

An unsexed juvenile (No. 19621) from Bassein, Thana, Bombay, with a white head, measures wing 308 and tail 187.

The females' wings are about the same size as those of the males, but their tails and tarsi measure slightly less.

As most books indicate that this species does not extend beyond Baluchistan, it may be mentioned that it has been recorded as far west as Jask in the Gulf of Oman.

EL *Butastur liventer* (Temminck) (Java) Rufouswinged Buzzard-Eagle 5 : 106
2 ♀♀ : 1 *Oheme*, *Prome District*, 1 *Atran*, *Burma*.

158 *Spizaetus nipalensis nipalensis* (Hodgson) (Nepal) Hodgson's Hawk-Eagle 5 : 89

6 : 1 ♂ 2 ♀♀ 3 o? (2 adult ♀♀)

1 Wazirabad, Gujranwala, Punjab; 1 Marnavli 7600', 1 Bhadrawah 9000', 1 Kashmir; 2 *Chin Hills*, *Burma*.

The species is separated from *Spizaetus cirrhatus* and *limnaeetus* by the feathering on the tarsus extending on to the mid-toe.

The wings measure 424(o?)-480 (♀) (475-502 FAUNA. 440-480 adult ♂ & ♀ Amadon, *Ibis* 1953 : 496) and tails 275-310 (283-298).

¹ Some of these identifications may need revision—H.A.

159 *Spizaetus nipalensis kelaarti* Legge (Ceylon) Legge's Hawk-Eagle 5 : 91

1 ♂ Palni Hills, south India. Wing 412, tail 276.

Sálim Ali (BIRDS OF TRAVANCORE COCHIN, 1953, p. 302) refers to a male with a 402 mm. wing. Though treated with doubt by Amadon (loc. cit.) and synonymised by Vaurie (1965 : 181) with the nominate form, this is retained in IND. HANDBOOK. The little evidence available indicates a smaller bird in the south.

160 *Spizaetus (cirrhatus) limnaeetus* (Horsfield) (Java) Changeable Hawk-Eagle 5 : 87

3 : 2 ♂♂ 1 o? (1 juv., all white below).

2 Darbhanga, Bihar ; 1 Jalpaiguri, Bengal.

This is distinguished from the next species by the absence of any crest. The upper parts are pale as in immature *cirrhatus*.

Wings 365, 392, 395 (400-438) Tails 246, 254, 260.

The smallest bird is in juvenile plumage. No specimen in the dark phase is available.

161 *Spizaetus cirrhatus cirrhatus* (Gmelin) (India) Crested Hawk-Eagle 5 : 85

15 : 6 ♂♂ 4 ♀♀ 5 o? (5 juveniles).

1 Dediapada, 1 Juna, Rajpipla ; 1 Khandala, 2 Ratnagiri, 2 Karwar ; 1 Palkonda Hills, Cuddapah ; 1 Chatrapur, Ganjam, 1 Vizagapatam District ; 1 Sepaya Sevan, Bihar ; 1 Kheri, Oudh, 1 Gonda, 2 Dehra Dun.

The original reference is not available but according to Baker the nominate form *cirrhatus* with India as the type locality was described by Gmelin on page 274 of SYSTEMA NATURAE (1788), while *ceylanensis* from Ceylon was described on the following page.

In the SYNOPSIS (and the IND. HANDBOOK) the latter is not accepted as different, but the type locality for the nominate form is changed to Ceylon. I do not understand under what provision the change of type locality has been made. If Baker is correct in his statement that the description of *S. c. cirrhatus* preceded that of *S. c. ceylanensis*, I presume the former would take priority over the latter (which would at most be its junior synonym) and would retain its type locality.

Wing ♂♂ 383, 388, 397, 405, 420 (405-430 ; IH 351-442).

Tail ♂♂ 260, 261, 267, 283, 285 (280-290 ; IH 229-285).

Wing ♀♀ 415, 440 ; imm., 395, 432 (448-462 ; IH 353-462).

Tail ♀♀ 285, 292 ; imm. 269, 281 (IH 266-300).

161a *Spizaetus cirrhatus ceylanensis* (Gmelin) (Ceylon) 5 : 86

1 ♂ adult, Ceylon. Wing 351 (353-383) ; tail 223 (227-260).

This race was described for its smaller size, and the single specimen supports Amadon (*Ibis* 1963 p. 493). The white border to the crest is more prominent than in other specimens.

162 *Spizaetus cirrhatus andamanensis* Tytler (Port Blair, South Andaman Island) 5 : 88

nil.

163 *Hieraaetus fasciatus fasciatus* (Vieillot) (Montpellier, France) Bonelli's Hawk-Eagle 5 : 77

7 : 4 ♂♂ 2 ♀♀ 1 o ?

1 Ormara, Baluchistan ; 1 Bahawalpur ; 1 Fatehpur, Rajasthan ; 1 Mehsana, 1 Baroda ; 1 Akalkot, Sholapur ; 1 Baghowni, Darbhanga, Bihar.

The specimens available measure slightly less than indicated in the FAUNA, and are corrected in IND. HANDBOOK.

Wing	Tail
4 ♂♂ 453-495 av. 468 (IH 458-520)	243-260 av. 252 (IH 246-266)
2 ♀♀ 470, 495 (IH 490-550)	255 (IH 254-285)

However, the key on page 265 of IND. HANDBOOK is copied from the FAUNA and still shows a minimum wing of 480.

The streaking on the underparts varies appreciably and one male and a female are much darker below. Both this and the next species can be separated from *Spizaetus*, by the primaries exceeding the secondaries by more than the length of the tarsus.

As the occurrence of this species in Assam and East Pakistan is queried (IND. HANDBOOK 1 : 266) it may be mentioned that Woods, in SHIKAR MEMORIES (1934) p. 30, gives its Manipuri name as *Koruk-Cowbee* and states that it takes winged duck.

164 *Hieraaetus pennatus* (Gmelin) (No type locality given) Booted Hawk-Eagle 5 : 79

12 : 7 ♂♂ 5 ♀♀ (6 adult, 6 juv.).

1 Chitral, N.W.F.P., 1 Jammu, Kashmir ; 1 Simla ; 1 Patan, Mehsana ; 2 Bombay, 1 Thana, 1 Ratnagiri ; 1 North Kanara ; 1 Benares ; 1 Bihar ; 1 Bhutan Duars.

The birds in adult and juvenile plumage do not differ in size and measure :

Wing	Tail
7 ♂♂ 375-390 av. 380 (370-412)	189-205 av. 198 (188-192)
5 ♀♀ 370-415 av. 391 (IH 385-423)	190-220 av. 204 (IH 204-225)

All the specimens from peninsular India have been obtained between November and March, and presumably represent non-breeding migrants.

165 *Lophotriorchis kienerii kienerii* (E. Geoffroy) (Himalayas) Rufous-bellied Hawk-Eagle 5 : 80

3 : 1 ♂ 1 ♀ 1 o ? (1 ♂ juvenile).

1 Anaimalai Hills, Travancore ; 1 Coonoor ; 1 Yellambellary, south India.

Wing ♂ juv. 384, ♀ 398, o ? 372 (♂ about 380, ♀ 405-433).

Tail ♀ juv. 185, ♀ 207, o ? 202 (♂ about 204, ♀ 228-242).

The measurements of these southern birds are a little smaller than those indicated in the FAUNA which are reproduced in IND. HANDBOOK (1 : 272).

166 *Aquila chrysaetos daphanea* Severtzov (Russian Turkestan, Mongolia, Himalayas, etc.) Golden Eagle 5 : 68

6 : 3 ♂♂ 1 ♀ 2 o? (3 imm.* with white in tails).

1 Quetta, Baluchistan ; 2 Chitral, N.W.F.P. ; 1 Kishinjunga Valley, Kashmir ; 1 Simla, 1 Wazirabad, Punjab.

The measurements differ from those in the FAUNA and IND. HANDBOOK.

	3 ♂♂	1 ♀	2 o?
Wing	610*, 622*, 660 (630-655)	617 (660-700)	615*, 670
Tail	311*, 324, 360* (315-335)	328 (350-365)	333*, 380
Tarsus	117, 117, 118 (89-95)	118 (95-105)	— —

167 *Aquila heliaca heliaca* Savigny (Upper Egypt) Imperial Eagle 5 : 69

12 : 4 ♂♂ 6 ♀♀ 2 o? (4 juv. streaked below).

1 *Belad, Tigris* ; 1 *Fateamah, Persia* ; 1 Lahore, 1 Wazirabad, 1 Hoshiarpur ; 2 Pithora, 1 Sind ; 1 Little Rann of Kutch ; 1 Bhavnagar ; 1 Goona, C.I. ; 1 Kurseong, Darjeeling.

The tail is barred in adults, and unbarred in juveniles. Before the buff nape patch is acquired, the all-brown bird is difficult to separate from *nipalensis*, for the measurements are not as distinctive as indicated in most literature and overlap to a great extent.

	♂	Wing	♀
<i>heliaca</i>	542, 565, 570, 570 (575-600)	575-620 av. 603 (605-630)	
<i>nipalensis</i>	560, 570, 580 (510-595)	550 (602-625)	
		Tail	
<i>heliaca</i>	262, 265, 274, 276 (253-270)	263-289 av. 280 (253-270)	
<i>nipalensis</i>	265, 282, 289 (250-290)	252 (250-290)	
		Tarsus	
<i>heliaca</i>	95, 100, 100, 104 (91-95)	100-107 av. 104 (91-95)	
<i>nipalensis</i>	90, 90, 93, 98 (85-89)	83, unsexed 99, 103	

168 *Aquila rapax vindhiana* Franklin (Vindhya Hills, Central India) Tawny Eagle 5 : 72

30 : 11 ♂♂ 15 ♀♀ 4 o?

1 Gidar, 1 Hazariganj, Kalat, Baluchistan ; 3 Hyderabad, Sind ; 1 Lahore, 1 Ambala, 4 Wazirabad, Punjab ; 1 Fatehpur, U.P. ; 2 Godwara, 1 Jodhpur, Rajasthan ; 1 Kutch ; 3 Palanpur, 1 Mehsana, 1 Dabka, 1 Cambay, 1 Rajpipla, Gujerat ; 2 Greater Bombay, 1 Lonavla, 3 Panchgani, Maharashtra ; 1 Gwalior, Madhya Pradesh.

As is well known, the birds show great differences in plumage. The present specimens can be divided roughly into two groups, pale (13) and dark (16). They measure :

Pale	♂♂ Wing	Dark
(IH 500-535 ; <i>Vaurie</i> 490-540 av. 520)		
480-539 av. 505		475-498 av. 488
	♂♂ Tail (IH 242-258)	
230-247 av. 241.6		221-246 av. 233

♀♀ Wing

(IH 510-560 ; Vaurie 510-550 av. 530)
500-533 av. 515 508-530 av. 520

♀♀ Tail (IH 242-285)

236-250 av. 242.5 234-262 av. 248

Though the number available is admittedly small, it is curious that the pale males, which represent a juvenile plumage as per Vaurie p. 184 (*contra* FAUNA loc. cit.), have slightly larger wings and tails than the dark (adult) males. The dark females average larger and in series are darker than the adult males.

Of the 4 specimens with unbarred tails, only one is in adult plumage (dark), while of the 7 with distinct caps of brown or rufous, 6 are pale, suggesting that the barred tail and the concolorous head and back are adult characters.

EL *Aquila rapax orientalis* Cabanis (near Sarepta, SE. Russia).

2 ♂? : 1 Basra, 1 Kut, Mesopotamia.

Both have large oval nostrils and measure :

No. 12303 Basra	Wing 520	Tail 291	Tarsus 94
12306 Kut	538	260	83

Both were named *Aquila rapax albicans* Rupp. (Type locality Simen Province in Abyssinia) by Selater (*JBNHS* 28 : 421) which race is not now accepted. No. 12306 has been identified as *orientalis* by Mr. Bond and I am leaving both under this name.

169 *Aquila nipalensis nipalensis* (Hodgson) (Nepal) Steppe Eagle.

5 : 70

8 : 4 ♂♂ 2 ♀♀ 2 ♂? (1 head only).

1 Sera, Tigris ; 1 Hissar, 1 Wazirabad, 1 Dharamsala Cantt. ; 1 Pung Bet*, Little Rann, Kutch ; 1 Gwalior ; 1 Gonda, U.P. ; 1 no data.

Several specimens have very distinct buffish wing bars, which is an immature character (BR. HANDBOOK 3 : 43), lacking in *heliaca*. The measurements of the specimens are compared to those of *heliaca* above, and shown to overlap to a great extent.

♂ Specimen No. 12290 (Little Rann of Kutch) has its breast streaked with buff and is very similar to the juvenile of *heliaca* [wing 550 (570 fresh), tail 276, tarsus 92]. It was obtained on the same day as an undoubted *heliaca*, but I am leaving it under this species, as it has been so identified by Sálím Ali and Meinertzhagen.

170 *Aquila clanga* Pallas (Russia and Siberia) Greater Spotted Eagle

5 : 74

9 : 6 ♀♀, 3 ♂? (3 spotted juvenile).

1 Baghdad ; 1 Ormara, Las Belas, Baluchistan ; 1 Gujranwala, Punjab ; 1 Bharatpur, Rajasthan ; 1 Kaira, Gujerat ; 2 Lake Beale, Nasik, Maharashtra ; 2 Rajputtee Chupra (Saran), Bihar.

6 ♀♀ Wing 500-540 (FAUNA 542-565, BR. HANDBOOK 500-550); tail 230-272 (240-260); tarsus 97-106 (103-106).

In IND. HANDBOOK, the measurements of four Indian females are given as: wing 514-545; tail 242-272.

This and the next species can be separated from the other *Aquila* by their round (and not elongated or ear-shaped) nostrils. The two from Rajputtee Chupra have 'roundish' nostrils and have been identified by C. H. Donald. Others listed as *A. nipalensis rapax* are very similar. It is also difficult to separate this species from *hastata* except by size—this is generally larger, but the wing and tail measurements are said to overlap. In the absence of any other character, I have for the moment transferred a spotted bird from Ormara to *clanga* leaving the sexed specimens in both species, curiously all females (there is no sexed male of either species!), in two distinct size groups.

171 *Aquila pomarina hastata* (Lesson) (Bengal) Lesser Spotted Eagle
5 : 75

5 : 3 ♀♀ 2 ♂?, heads only*

1 Gonda*, 1 Gorakhpur*, U.P.; 1 Tirhut, 1 Binburn, Bihar (?); 1 Kalyan, Thana, Maharashtra.

1 ♀ from Tirhut is a fledgling with pale longitudinal specks on the head, *contra* IH 1 : 283.

2 ♀♀ wing 470, 475 (493-508); tail 208, 234 (230-248); tarsus 93, 93 (100-104).

172 *Ictinaetus malayensis perniger* (Hodgson) (Nepal) Black Eagle
5 : 83

4 : 2 ♂♂ 2 ♂?

2 Darjeeling, Bengal; 1 Nilgiris, Madras; 1 Wynaad, Kerala.

The four specimens do not vary appreciably in the size of their wing (550-570) and tail (294-309) but two (1 ♂? Wynaad, 1 ♂ Darjeeling) have their bill smaller (27 mm. from cere) than the other two—(30 mm. 1 ♂ Darjeeling, 1 ♂? Nilgiris).

In IND. HANDBOOK (1 : 284) it is implied that north of Goa along the Western Ghats only sight records exist, from Bombay and Jambughoda in Gujerat. While there can be no doubt that some of these records are good, it may be worthwhile drawing attention to a specimen which was shot at Virar, a little north of Bombay, the head and legs of which were identified at the Society (*JBNHS* 41 : 899).

172a *Haliaeetus albicilla* (Linnaeus) (Sweden) Whitetailed Sea Eagle
5 : 110
nil.

This species is a winter visitor to our area extending to the Punjab, North West Provinces (Uttar Pradesh), and Sind. It was omitted in the SYNOPSIS but is included in IND. HANDBOOK where it is spoken of as a casual winter visitor to West Pakistan (Baluchistan, Sind, NWF. Province) and of which there is only one reliable record from India (Kulu, Donald).

173 *Haliaeetus leucogaster* (Gmelin) (Prince's Island, Indonesia)
Whitebellied Sea Eagle 5 : 111

3 : 1 ♂ 2 ♀ (1 juv.*).

1 Chatrapore, Ganjam, A.P. ; 1* Port Blair, Andamans ; 1 Campbell Bay, Great Nicobar.

174 *Haliaeetus leucoryphus* (Pallas) (Lower Ural River) Pallas's Fishing Eagle 5 : 112

9 : 7 ♂♂ 2 ♀♀ 3 in adult plumage.

1 Kashmir ; 1 Wazirabad, 1 Bahawalpur, Punjab ; 1 Saran, 1 Tirhut, 1 Baghowni, 1 Lowa Chupra, Bihar ; 1 Kurseong, Bengal ; 1 no data.

175 *Ichthyophaga ichthyaetus ichthyaetus* (Horsfield) (Java) Greyheaded Fishing Eagle 5 : 114

4 : 2 ♀♀ 2 ♂♂

1 Kissenganga (Kashmir ?) ; 1 Melghat, Berar ; 1 Narhora, Madhubani, 1 Nawada Lake, Champaran, Bihar.

No. 1247, a ♀ fledgling taken at Narhora, Madhubani, by C. M. Inglis, has the feathers of the head heavily marked with short streaks of buff, a pale buff chin, and brown under-parts streaked with buff.

176 *Ichthyophaga ichthyaetus plumbeiceps* Baker (Trincomalee, Ceylon)
Ceylon Greyheaded Fishing Eagle 5 : 116

nil.

177 *Ichthyophaga nana plumbea* (Jerdon) (Northwestern Himalayas)
Himalayan Greyheaded Fishing Eagle 5 : 117

1 ♂ Balasun 2000', near Darjeeling, Bengal.

178 *Torgos calvus* (Scopoli) (Pondicherry) Black Vulture 5 : 9

1 ♀ Gazipur, U.P.

179 *Aegyptius monachus* (Linnaeus) (Arabia) Cinereous Vulture 5 : 7

1 ♀ Hoshiarpur, Punjab.

180 *Gyps fulvus fulvescens* Hume (Gurgaon, Punjab) Griffon Vulture 5 : 11

1 ♀ Kurla, Bombay. (February 1893).

This specimen, evidently a straggler, is the southern-most record of this species.

181 *Gyps himalayensis* Hume (Himalayas from Kabul to Bhutan)
Himalayan Griffon Vulture 5 : 13

nil.

182 **Gyps indicus indicus** (Scopoli) (India) Indian Longbilled Vulture 5 : 16

3 : 1 ♂? 2 nestlings.

1 nestling, Karnala, Panvel, Kolaba Dt. ; 2 ?

The young in the nest are in colour similar to the adults which can be separated from immature *bengalensis* (yet without white backs or under-wings) by the longer cere.

183 **Gyps indicus jonesi** Whistler (Margala Range, Rawalpindi Dist.) 5 : 18

nil.

184 **Gyps indicus tenuirostris** G. R. Gray (Kahtmandu, Nepal) 5 : 17

nil.

185 **Gyps bengalensis** (Gmelin) (Bengal) Whitebacked Vulture 5 : 19

8 : 4 ♂♂ 3 ♀♀ 1 ♂? (1 nestling).

6 Bombay & Salsette, 1 Panvel, Kolaba Dist. ; 1 Gazipur, U.P.

The nestling is almost as dark as the adult, but with no white on the rump or under-wings. The breast is prominently streaked with white. Nos. 12092 and 22697 were listed as *G. indicus*, but they are very similar to others in the brown, sub-adult plumage of this species, in which I have seen it breeding. The number of tail feathers is not 14, but this character does not show even in the adult *bengalensis* available, and I am for the moment treating them as of this species on the basis of their shorter ceres.

186 **Neophron percnopterus percnopterus** (Linnaeus) (Egypt) Egyptian or Scavenger Vulture 5 : 22

187 **Neophron percnopterus ginginianus** (Latham) (Gingee, Coromandel) 5 : 23

4 : 1 ♂ 2 ♀♀ 1 ♂? (1* immature ♀).

1 north of Ornach, Baluchistan ; 1 Datta Kehl, N.W.F.P. ; 1 Lolab Valley, Kashmir ; 1 Simla*.

Wings ♂ 455 ♀♀ 455, 460 ♂? 485 (474-506 ; *ginginianus* 443-482).

Tail 235, 235, 220, 230 (205-263 ; *ginginianus* 228-251).

Culmen 58, 62, 59, 66 (58-65 ; *ginginianus* 72-85 ?).

According to the distribution usually accepted, these birds should all be of the typical race, but the measurements are closer to those of *ginginianus* and the bills in all the adults are bright yellow. Whistler (*Ibis* 1922 : 414) and Paludin ON THE BIRDS OF AFGHANISTAN (1959 : 77) have referred to these incongruities regarding size (Punjab) and colour but in the absence of any material from further south, it is not possible to determine to what race or races these specimens belong. IND. HANDBOOK (1 : 311) suggests the possibility of both races occurring together and interbreeding over marginal areas.

188 *Gypaetus barbatus aureus* (Hablizl) (Province of Gilan, northern Persia) Bearded Vulture or Lämmergeier 5 : 26

13 : 4 ♂♂ 1 ♀ 8 o ? (2, heads only) (6 ad. 5 juv.).

1 Quetta (? Museum) ; 2 Chitral ; 2 Bhadarwar, Kashmir ; 3 Simla Hills, 1 Eastern Himalayas ; 4 no data (2, heads only).

The three males in adult plumage measure :

Wing 777, 805, 820 ; tail 470, 542, 493 ; tarsus 93, 93, 104.

189 *Circus cyaneus cyaneus* (Linnaeus) (Vicinity of London, England) Hen-Harrier 5 : 131

11 : 5 ♂♂ 4 ♀♀ 2 o ? (3 ad. ♂♂ 1 ad. ♀).

1 *Astrabad, Caspian Province* ; 1 *Bampur, Persian Baluchistan* ; 1 *Murghab, Herat, Afghanistan* ; 1 *Gyantse, Tibet* ; 1 *Datta Kehl, Waziristan* ; 1 *Gilgit, Kashmir* ; 1 *Simla, 1 Patiala* ; 3 *Peking, China*.

The notch in the outer web of the 5th primary separates this from *macrourus* and *pygargus*. Thirteen specimens were wrongly listed under these three species.

Wing	ad. ♂♂	337, 341, 347	ad. ♀	388
Tail		211, 218, 220		244
Tarsus		67, 69, 69		75

190 *Circus macrourus* (S. G. Gmelin) (Voronezh, Southern Russia) Pale Harrier 5 : 128

34 : 20 ♂♂ 11 ♀♀ 3 o ? (juv. 5 ♂♂, 4 ♀♀).

3 *Randa Tanhat, Yemen* ; 1 *Sulaimaniya, 4 Mesopotamia* ; 2 *Shiraz* ; 1 *Chitral* ; 1 *Boya, N. Waziristan* ; 1 *Wazirabad, 1 Jagadhiri, Punjab* ; 1 near *Manchar Lake, Sind* ; 1 *Delhi* ; 1 *Sunda Hills, Jaswantipura Dist., Rajputana* ; 3 *Cutch* ; 1 *Dohad, 1 Nadiad* ; 1 *Pasola, E. Khandesh, 1 Nasik, 2 Bombay, 2 Thana, 2 Jeypore, Vizagapatnam* ; 1 *Meerut* ; 1 *Baghowni, Tirhut* ; 1 *Calcutta Market* ; 1 no data.

	Wing	Tail	Tarsus
15 ad. ♂♂	327-350 av. 338 (332-360)	197-213 av. 204 (201-221)	62-73 av. 65 (66-70)

These include 8 birds in which the heads are yet brown and not grey.

5 juv. ♂♂	322-334 av. 330	200-213 av. 209	65-70 av. 68.5
7 ad. ♀♀	362-381 av. 371 (IH 345-386)	226-241 av. 233 (IH 229-247)	65-75 av. 71 (67-78)
4 juv. ♀♀	352-370 av. 363	220-244 av. 232	71-75

The Pale and Montagu's Harriers differ from the other three species in lacking the notch on the outer web of the 5th primary. In this species the coverts normally conceal the notch in the outer web of the 2nd primary, which remains exposed in Montagu's. If the coverts are not fully grown (?), the longer tarsus is distinctive.

191 *Circus pygargus* (Linnaeus) (England) Montagu's Harrier 5 : 130

8 : 5 ♂♂ 3 ♀♀ (2 adult ♂♂).

1 *Murghab, Herat* ; 1 *Kronthal State* ; 1 *Belapur, Ahmednagar, 2 Nasik, 1 Talegaon Poona, 1 Andheri, Bombay* ; 1 *Jubbulpore, M.P.*

♂♂ Wings ad. 355, 385 ; juv. 334, 348, 356 (344-395).

♀♀	357, 367, 369 (344-395).
♂♂ Tails	ad. 210, 222 ; juv. 205, 208, 209 (213-241).
♀♀	215, 216, 227.
♂♂ Tarsus	ad. 57, 58, juv. 55, 56, 57 (55-65)
♀♀	57, 58, 61.

This species can be separated from *macrourus* by the primary coverts falling short of the notch in the outer web of the 2nd primary, and by the shorter tarsus.

192 *Circus melanoleucos* (Pennant) (Ceylon) Pied Harrier 5 : 132

8 : 7 ♂♂ (2 by plumage) 1 ♀* (missing).
1 Rajpotee Chupra, 1 Baghowni, Tirhut, 1 Narhar, Madhubani ; 1 <i>Upper Burma</i> , 3* <i>Prome District</i> ; 1 no locality (collected by F.J.R. Field=U.P.?).
♂♂ Wings 345-363 av. 353 (344-367).
♂♂ Tails 196-218 av. 206 (197-217).
♂♂ Tarsus 71-75 av. 73 (76-80).

As in *C. cyaneus* the 5th primary is indented on the outer web. Two *C. cyaneus* in female plumage were listed under this species which has a larger tarsus.

193 *Circus aeruginosus aeruginosus* (Linnaeus) (Sweden) Marsh Harrier 5 : 134

27 : 17 ♂♂ (1 by plumage) 6 ♀♀ 4 o? (10 ad. ♂♂ with grey wings and tail, 6 sub-ad. with pale heads, 1 juv. all brown, with pale nape).

1 *Amara*, 2 *Lake Akkarkuf*, 1 *Basra, Iraq* ; 1 *Magos*, 1 *Gumazzi*, 51 miles west of *Turbat*, 1 *Kaftarok*, 11 miles east of *Shiraz, Iran* ; 1 Chitral, 1 Wana, S. Waziristan ; 1 Shah Hassan, Manchar Lake, 1 Sufi Talao, Pithora, 1 Dadin Larkana, Sind ; 1 Cutch ; 1 Gwalior ; 1 Bassein, 1 Karanja Is., Bombay ; 2 Kanara, 1 Mysore ; 1 Gondia, C.P. ; 2 Baghowni, 1 Saran, Bihar ; 2 *Prome*, 1 *Henzada, Burma* ; 1 no data.

Wing

♂♂

10 ad. 364-399 av. 384 (385-405 ; BR. HANDBOOK 375-415) 6 sub-ad. 379-415 av. 393.

♀♀

4 ad. 395-422 av. 407 (390-430 ; BR. HANDBOOK 390-420)

2 juv. 418, 423

Tail

♂♂

10 ad. 210-227 av. 216 (234-245 ; BR. HANDBOOK 210-230) 6 sub-ad. 213-231 av. 222.

♀♀

4 ad. 219-255 av. 231.5 (238-258)

2 juv. 233, 240

Tarsus

♂♂ 10 ad. 76-84 av. 81.5 (80-85) 6 sub-ad. 80-87 av. 83.

♀♀ 4 ad. 81-87 av. 84 (85-90) 2 juv. 84, 86.

The males average a little smaller than the females, but it is curious that the sub-adults, with pale caps similar to the females, are larger than

the adults. This is possibly due to incorrect sexing. One specimen with a grey tail was marked female but has been measured with the males. There is great variation in the tone of brown but I am unable to separate any as *spilonotus*.

194 *Circus aeruginosus spilonotus* Kaup (Asia) 5 : 135
nil.

195 *Circaetus gallicus gallicus* (Gmelin) (Astrakan, South Russia)
Short-toed Eagle 5 : 93

15 : 7 ♂♂ 6 ♀♀ 2 o? (3 juveniles).

1 Wazirabad, 1 Madhopur, Punjab ; 1 Kuno, Gwalior ; 1 Deesa, 2 Baroda, 1 Daman ; 1 Ghoti, Nasik, 3 Thana, 1 Bombay ; 1 Ootacamund ; 1 Fatehpur, U.P. ; 1 no data.

Wing ♂♂	510-533 av. 520 (520-536)	♀♀	508-554 av. 536 (530-571)
Tail	248-284 av. 277 (252-288)		268-295 av. 270 (287-330)
Tarsus	83-94 av. 89 (92-97)		87-101 av. 93

In this small series, the barring on the underparts appears more prominent in the females than in the males. The three juveniles show white on the head and are on the upperparts slightly paler than the others, though they agree with them in their measurements.

Two males are pure white below except for fine shaft streaks on the chin and upper breast.

196 *Spilornis cheela cheela* (Latham) (Lucknow) Crested Serpent Eagle 5 : 96

13 : 6 ♂♂ 5 ♀♀ 2 o? (1 juvenile ♀).

1 Patiala, Punjab ; 1 Bhavnagar ; 1 Malwa, C.I. ; 1 Hoshangabad, M.P. ; 1 Baghowni, Darbhanga, Bihar ; 1 Dehra Dun, 2 Salukapur, 1 Almora ; 1 Nepal ; 1 Kurseong, Bengal ; 2 Assam.

The nominate race can be differentiated from southern *melanotis* by the barring on the upper breast, the black chin, and the almost-white pale bar on the tail. This type occasionally occurs in the normal range of *melanotis* and represents either an individual variation or a non-breeding migrant. Nos. 12406 from Bhavnagar and 22376 from Hoshangabad, both males are two such instances, which have been noted as far south as Mysore (*JBNHS* 44 : 21).

On the whole the males appear to have their underparts paler than the females and are also slightly smaller.

Wing	Tail	Tarsus
6 ♂♂ 445-500 av. 476	255-309 av. 287	96-113 av. 104
4 ♀♀ 458-505 av. 477	266-315 av. 291	102-110 av. 106
♂♀ (468-507)	(295-315)	(100-102)

This race is slightly larger than the southern *melanotis*.

197 *Spilornis cheela melanotis* (Jerdon) (At the foot of the Nilgiris) 5 : 98

15 : 5 ♂♂ 6 ♀♀ 4 o? (2 ♂♂, 2 ♀♀ juveniles).

1 Palanpur, 2 Gir ; 2 Ratnagiri ; 2 North Kanara ; 1 south India ; 1 Tenmalai, Travancore ; 2 Vizagapatam ; 1 Bastar, M.P. ; 1 Badrawa, 1 Berbera, 1 Chilka.

The brown upper breast and the grey band on the tail separate this from the northern race. The black chin is also absent.

The adults measure :

	Wing	Tail	Tarsus
♂♂	415, 419, 439	255, 258, 275	95, 100, 108
♀♀	425, 431, 457, 465	264, 274, 275, 302	95, 99, 102, 107

198 *Spilornis cheela spilogaster* (Blyth) (Ceylon) 5 : 100
nil.

199 *Spilornis cheela burmanicus* Swann (Jobin, Thayetmyo, Burma) 5 : 99

2 : 1 ♂ 1 ♀

	Wing	Tail	Tarsus
♂ <i>Tonokmaw, Prome</i>	447	260	98
♀ <i>Akyab</i>	472	283	102

These two specimens could well be included with the nominate form which they resemble in the barring on the lower parts, the pale patch on the tail, and the dark chin (*Akyab*).

200 *Spilornis elgini* (Blyth) (South Andaman Island) Andaman Serpent Eagle 5 : 103

1 ♀ Mannarghat, South Andamans.

Wing 380 tail 218 tarsus 80.

As indicated in my Andaman paper (*JBNHS* 61 : 509), this appears to be very distinct from the paler Serpent Eagle *davisoni* which occurs in the same area, and must be placed in a separate species.

200a *Spilornis cheela davisoni* Hume (Neighbourhood of Port Blair) 5 : 103

2 ♀♀ : 1 Bakultala, Middle Andamans, 1 Pochang, South Andamans.

Wing 393, 393 ; tail 235, 245 ; tarsus 80, 82.

But for its smaller size, this form appears to be very similar to *melanotis*. In IND. HANDBOOK it is synonymised with *elgini*.

201 *Spilornis cheela minimus* Hume (Camorta, Nicobar Islands) 5 : 102
nil.

202 *Spilornis cheela klossi* Richmond (Pulo Kunyi, Great Nicobar Island) 5 : 102
nil.

203 *Pandion haliaetus haliaetus* (Linnaeus) (Sweden) Osprey 5 : 3

9 : 5 ♂♂ 4 ♀♀

1 *Shaiba, Arabia* ; 1 *Tanb Island, Persian Gulf* ; 1 Cashmere* ; 1 Bahawalpur State ;
1 Chilka Lake, Orissa ; 1 Madhubani, 1 Tirhut, Bihar ; 1 Dehra Dun ; 1 no data.

	Wing	Tail	Tarsus
5 ♂♂	460-490 av. 474 (452-495)	187-215 av. 201 (191-223)	59-61 av. 60 (59-65)
4 ♀♀	470-491 av. 481 (468-508)	205-215 av. 210 (204-220)	58-65 av. 62

IND. HANDBOOK adds the following measurements :—

2 ♂♂	481-481	201-210	—
3 ♀♀	482-537	200-251	60-61

* Only one specimen (No. 12082) has a complete brown band across the breast.

204 *Microhierax caerulescens caerulescens* (Linnaeus) (Asia = Bengal)
Redthighed Falconet 5 : 52

8 : 1 ♂ 4 ♀♀ *3 o? juveniles.

1 Nepal ; 3 Darjeeling, Bengal ; *4 Assam.

The male measures—wing 100, tail 59 and the females—105-114 av. 110.5 and 57-67 av. 61. The 3 juveniles, which are not dated, were probably collected at the same time by C. M. Inglis. The breast is whitish, but not quite white as the Burmese race.

Ripley has changed the long-standing English name of Redlegged to Redbreasted. The first name was misleading for it is the thighs, and not the legs, that are so coloured. I think it would be best to associate the distinctive term with that part which varies in colour in the different species, as has been done by Smythies in THE BIRDS OF BURMA.

EL *Microhierax caerulescens burmanicus* Kirke-Swann (Thayetmyo)
Burmese Redthighed Falconet 5 : 53

3 : 1 ♀ 2 o?

1 *Kungulthana* ; 1 *Mt. Victoria* ; 1 *Taunggyi, S. Shan States*.

The white breast and smaller size, wing : 94, 96, 101 (tails 55, 55, 61) distinguish them from Indian birds. The one bird marked as a female has the smallest wing and may have been wrongly sexed.

205 *Microhierax melanoleucos* (Blyth) (Assam) Whitethighed Falconet 5 : 54

2 : 1* ♂ 1 o?

1 *Haflong, Cachar*, 1* *Margherita, Lakhimpur, Assam*.

The measurements of the male are not included in the FAUNA, and the single specimen appears to be slightly smaller than the females :

Wing 108 (111-117), tail 66 (71-73), tarsus 20 (22).

As my measurements differed from those of the same specimen in IND. HANDBOOK, I have rechecked mine.

206 *Falco biarmicus cherrug* J. E. Gray (India) Saker or Cherrug Falcon 5 : 39

3 : 2 ♂♂ 1 ♀

1 *Baghdad, Iraq* ; 1 *Ahwaz, Iran* ; 1 *Waynabad, Kashmir*.

2 ♂♂ Wing 334, 365 (348-370) ; tail 186, 195 (190-200)

1 ♀ Wing 410 (390-412) ; tail 222 (207-210).

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207 *Falco biarmicus milvipes* Jerdon (Umballa, India) Shanghar Falcon 5 : 41

2 : 1 ♀ 1 ♂ ?

1 *Kashgar, China* ; 1 Ladakh, Kashmir.

Wing 334 ♀, 363 (♂♂ 340-351, ♀♀ 374-435)

Tail 186 ♀, 190 (188-236)

208 *Falco biarmicus jugger* J. E. Gray (India) Laggar Falcon 5 : 37

18 : 7 ♂♂ (2 by size) 11 ♀♀ (1 by size)

(1 * ♀ pullet, 2 ♂♂ 6 ♀♀ juveniles)

1 Dandar, W. Kolwa, 1 Chuttok, 95 miles south of Kalat, Baluchistan ; 2 Bhong, Bahawalpur, 1 Jhelum, Punjab ; 1* Bela Island, Kutch, 1 Deesa, Palanpur, 1 Dabka, Baroda ; 1 Jaswantpura, Rajputana ; 1 Mandu, Dhar State, C.I. ; 2 Mira Road, Salsette, 1 Wada, Thana, 1 Bombay ; 2 Tirhut, 1 Rajputee Chuprah, Bihar ; 1 Fatehpur, U.P.

IND. HANDBOOK has this as a race of *F. biarmicus* but Vaurie (1965) leaves it as a separate species as has been customary.

In this series the males and females fall into two size groups in which there is no overlap in the size of the wings. Three unsexed birds are placed according to their size. The adults are no larger than the juveniles and their measurements are grouped together :

	Wing	Tail	Mid-toe without claw
7 ♂♂	313-326 av. 319 (305-328)	162-182 av. 169 (167-175)	44-46 av. 45
10 ♀♀	331-369 av. 354 (323-364)	173-201 av. 193.6 (169-198)	44-51 av. 48

In IND. HANDBOOK (1 : 346), the measurements are :—

♂♂	316-335	164-183
♀♀	357-370	186-210

According to the literature available, the sexes are similar. Whereas in the juveniles the sexes only differ in size, in the five adult males the white of the chin and breast extends to the lower belly which is marked with fine dark streaks, while in the four adult females the white is restricted to the chin and upper breast, the lower parts being brown as in the juveniles. In the pullet, the head is heavily marked with pale buff and the tail is more broadly tipped with white than in any of the others.

209 *Falco peregrinus japonensis* Gmelin (flew on board off Japan) Peregrine Falcon (5 : 32 as *F. p. calidus*)

14 : 9 ♂♂ 5 ♀♀ (5 ad. grey above)

1 *Baghdad* ; 1 Wazirabad, 1 Punjab ; 1 Kutch ; 2 Bombay, 1 Kihim, Kolaba ; 1 at sea between Bombay and Aden ; 1 North Kanara ; 1 Malabar Coast ; 1 Konkardarla, Vizagapatam ; 1 Bihar ; 1 *Peking, China* ; 1 no data.

The subspecific identity of the real peregrine wintering in India still appears uncertain. Jerdon and Blanford noted it as *peregrinus* and

the specimen from Kihim, Kolaba District, was said to be of the nominate form by Whistler, working in England in the mid-thirties. Stuart Baker said they were *calidus*, and this is confirmed by Vaurie in 1965. Ripley has called them *japonensis*. With the material available, it is impossible to express any opinion, but I am leaving them as in the SYNOPSIS and IND. HANDBOOK. This group includes all the specimens which have their underparts white, excluding those either deep rufous below with dark heads and cheeks (*peregrinator*) or a paler rufous below with rufous on the nape and on the cheeks (*babylonicus*).

While they all fit into compact groups, this arrangement leaves no juveniles of *peregrinator*, and it is possible that some adjustments are necessary.

Specimen No. 12113 was taken at sea between Bombay and Aden, and is possibly the bird listed in Blanford (3 : 416) as *peregrinator*.

Specimen No. 12114 a juvenile female from Peking, China, is left among the peregrines as originally marked, but it differs from all the others in the first primary on one side (it is broken on the other) being shorter than the third and in all the tail feathers being unbarred brown as in *F. jugger*. However, it has the heavy cheek stripe of *peregrinus* and the bill (27 mm.) and mid-toe (58 mm.) are too large for *jugger*, which further does not appear to have been recorded in China.

The measurements of the 3 races are :—

	Wing	Tail	Tarsus
♂♂	<i>japonensis</i> 309-319 av. (297-316 <i>calidus</i>)	138-159 av. (134-145, BR. HANDBOOK 130-158)	48-54 av. (49-51)
	<i>babylonicus</i> 270 (273-284)	122 (126-135)	48 (45-46)
	<i>peregrinator</i> 274, 285, 289 (265-295)	121, 127, 131 (128-162)	47, 49, 52 (48-50)
♀♀	<i>japonensis</i> 344-362 av. 354 (344-379)	162-169 av. 167	51-58 av. 54
	<i>babylonicus</i> 319, 324, 329 (320-338)	148, 156, 158 (151-158)	52, 54, 55 (53-55)
	<i>peregrinator</i> 333 (312-342)	153	54

210 *Falco peregrinus babylonicus* P. L. Sclater (Oudh) Redcapped Falcon 5 : 36

4 : 1 ♂ 3 ♀♀ (one by size).

1 Ambala, Punjab ; 1 Radhanpur, 1 Gujerat ; 1 no data.

The three females were mixed up with the other peregrines, but all have a varying amount of rufous on the nape and on the cheeks. The measurements are tabled under the preceding form.

211 *Falco peregrinus peregrinator* Sundevall (Indian Ocean, off the Nicobar Islands) Shahin or Indian Peregrine 5 : 34

4 : 3 ♂♂ (one by size) 1 ♀.

2 Simla Hills, 1 Bokloh, Punjab ; 1 Karnala Fort, Pen, Kolaba.

The last bird which was evidently breeding is the darkest rufous on the underparts and smaller than the other two from the Punjab—wing 274, cf. 285, 289 ; tail 121, cf. 127, 131. Other details of measurements are tabled under *japonensis*.

212 *Falco subbuteo subbuteo* Linnaeus (Sweden) Hobby 5 : 42

11 : 2 ♂♂ 8 ♀♀ 1 o ? chick (4 juvenile ♀♀).

1 *Azizeih, Tigris, Mesopotamia* ; 1 Chitral ; 3 Simla, NW. Himalayas ; 1 Mashobra, Koti State ; 4 Bombay ; 1 *Tiddin, Burma*.

	Wing	Tail
♂♂	257, 271 (245-265)	131, 139 (129-142)
♀♀	261, 262, 265, 269 (273-280)	115, 131, 136, 136 (146-148)
	BR. HANDBOOK 265-280)	

The two males show almost no sign of barring on the tail. In the adult females the collar is more pronounced than in the males, which are also more completely grey above.

213 *Falco subbuteo centralasiae* (Buturlin) (Baimgol, Tianshan) 5 : 42

1 ♀ *Langar, Yarkand*.

Specimen No. 12153 is slightly paler above than the other females and also has a larger wing 276 (277-286). The original label indicates a weight of 8.3 oz.

214 *Falco severus rufipedoides* Hodgson (Nepal) Indian Hobby 5 : 47

3 : 1 ♂ 2 ♀♀ (one by size)

1 Bhutan Duars ; 1 Sibang, Darjeeling ; 1 Tegu, Lohit Valley.

♂	Wing 205 (211-219)	Tail missing (94-95)
♀♀	240, 247 (237-248)	112, 114 (105-112)

215 *Falco severus severus* Horsfield (Java) Burmese Hobby 5 : 45

5 : 3 ♂♂ (one by size) 2 ♀♀ (by size)

1 Cachar, Assam ; 1 *Pokkoku, Upper Burma* ; 1 *Pegu, 2* Thaung Valley, Amherst, Burma*.

♂♂ Wing 216*, 218, 222 (not available in FAUNA or in IH) Tails 90, 95*.

♀♀ ,, 233*, 243 (IH 221-245.5) Tails 108*, 109 (IH 95-115).

The two from Thaung Valley though not sexed are marked as shot off a nest on the same day and are no doubt a pair. The birds north of the Brahmaputra are said to be paler on their underparts (*rufipedoides*)

but I am unable to see any differences in the small number available which are now separated entirely by their places of origin.

- 216 **Falco concolor** Temminck (Senegal etc.) Sooty Falcon
2 ♂♂ Both with rufous on underparts, obtained from Muscat Museum.
These specimens were found listed with *Falco subbuteo*.

- 217 **Falco columbarius insignis** (Clark) (Fusan, Korea) Merlin 5 : 49

- 218 **Falco columbarius christianiludovici** Kleinschmidt (Caucasus) 5 : 50
4 : 2 ♂♂ 2 ♀♀ (1 adult ♂).
2 Wazirabad, Punjab ; 2 Peking, China.

The two birds from the Punjab, one of which died in captivity, though originally correctly identified as to species were listed under *Falco tinunculus* and *F. chicquera*. The subspecific identification is difficult, but the Punjab female is slightly paler than that from Peking. It is probable that the Punjab birds are *christianiludovici* and those from China are *insignis*.

- 219 **Falco chicquera chicquera** Daudin (Bengal) Redheaded Merlin
5 : 47

21 : 10 ♂♂ (2 by size) 11 ♀♀ (2 by size) (1 pullet, 2 juvenile).

1 Waziristan, 1 Chaklala, N.W.F.P. ; 1 Wazirabad, 1 Sadhoki, Gujranwala, 1 Dhulkot, Ambala ; 1 Delhi ; 1 Gwalior ; 1 Radhanpur, 1 Kutch, 1 Ahmedabad ; 1 Thana, 1 Kolaba ; 1 Palghat, Kerala ; 3 Tirhut, 1 Darbhanga, Bihar ; 1 Upper Burma ; 3 no data.

Wing		Tail	
♂♂ 194-204	av. 199 (IH 190-207)	120-132	av. 126 (IH 124-137)
♀♀ 221-236	av. 227 (IH 220-232)	143-155	av. 150 (IH 148-156)

The two juveniles have their heads darker than the adults. The females are a clearer grey above than the males.

- 220 **Falco vespertinus amurensis** Radde (Amur) Redlegged Falcon 5 : 58

3 : 2 ♂♂ 1 ♀

1 Ambarnath, Thana, Maharashtra ; 2 Cachar.

- EL **Falco naumanni naumanni** Fleischer (Southern Germany) Lesser Kestrel

3 ♂♂

1 Katunak, 8 miles south of Shiraz, Iran ; 2 Ruauda, Tanhat, Yemen, Arabia (Philby 1940).

These three birds are distinctly paler, both above and below, than those listed *pekinensis*, and have been identified as *C. naumanni naumanni* by Whistler. The Iraq and Persia specimens under 221 were recorded (*JBNHS* 28 : 420) as of the nominate race, but cannot be separated from birds from Manipur and Orissa which are presumably *pekinensis*. Both races are accepted in Western Asia in Peters (1 : 298) but Vaurie (p. 234) does not recognise *pekinensis*.

221 **Falco naumanni pekinensis** Swinhoe (Near Peking, China) Lesser Kestrel 5 : 66

10 : 6 ♂♂ 4 ♀♀.

4 *Felujah*, 2 *Sulaimaniyah*, *Iraq*; 1 *Persepolis*, *Persia*; 2 *Balasore*, *Orissa*; 1 *Manipur*.

Specimen Nos. 12265, 12266, and 12267 collected by C. R. Pitman are all in male plumage. Except for the date '25-6-1917' on two of them, there are no other data. In 'The Birds of Mesopotamia' (*JBNHS* 28 : 420) reference is made to 3 females and a male collected by Pitman at *Felujah* between 8 and 16 April 1917. A fourth bird of this species in female plumage also bears the date '25-6-1917' and was collected by Pitman. The date of Pitman's other specimens show that he was in *Mesopotamia* on 25 June 1917 and, though the sexes are wrongly quoted, the present specimens which do not bear any field or original (?) labels are no doubt identical with those referred to in the above-mentioned paper as of the nominate race. Two females were incorrectly listed as *Cerchnis tinnunculus*.

222 **Falco tinnunculus tinnunculus** Linnaeus (Europe, restricted Sweden) Kestrel 5 : 61

223 **Falco tinnunculus interstinctus** McClelland (Assam) 5 : 61

83 : 38 ♂♂ 40 ♀♀ 5 o ?

2 *Sheik Saad*, 1 *Amara*, 2 *Baghdad*, 1 *Razani*, 1 *Shatt-el-Adhain*, 1 *Hit*, 1 *Tobbat*, *Mesopotamia*; 4 *Mishim*, 1 *Tagoira*, *Persian Gulf*; 2 *Shiraz*, 1 *Shustar*, *Persia*; 1 *Quasarquand*, *Persian Baluchistan*; 1 *Boya*, 2 *Quetta*, 1 *Wana*, 2 *Chitral*, *N.W.F.P.*; 1 *Kashmir*; 14 *Simla*, 1 *Keonthal*, 1 *Patiala*, 1 *Dakuri* (?) 8900', 1 *Bahawalpur*, 1 *Ludhiana*, 1 *Delhi*; 1 *Joshinathi*, 1 *Chamoli*, *Garhwal*, *U.P.*; 1 *Kaira*, 1 *Dwarka*, 2 *Cambay*, 1 *Baroda*, *Gujerat*; 3 *Nasik*, 3 *Bombay*, 2 *Thana*, 1 *Kolaba*, 1 *Poona*, 3 *Khandala*, 2 *Panchgani*, 1 *Malwan*, 1 *Sawantwadi*; 1 *Coonor*, 1 *Kurnul*, 2 *Madras*; 1 *Baghowni*, *Tirhut*, 1 *Rajputtee*, *Saran*; 1 *Phalut*, *Darjeeling*; 1 *Dimapur*, 1 *Imphal*, *Manipur*; 2 *Upper Burma*, 1 *Yarkand*, 2 *Peking*, *China*.

The two from *Peking* are both males, one in first year and the other in adult plumage. The former is as dark as *objurgatus* but with a duskier and more smoky effect. The adult can be compared with others from *India*. With the material and literature available, I am unable to separate *interstinctus* from *tinnunculus* in the large series.

Five of the females including specimens collected by *Jones* and *Capito* have grey heads and cannot be distinguished from males; this is a character not accepted for the nominate race.

Three females from *Panchgani* and *Madras* (2) collected in *March*, *January*, *February* are exceptionally red above.

224 **Falco tinnunculus objurgatus** (Baker) (*Ootacamund*, *Nilgiris*) *Indian Kestrel* 5 : 65

8 : 4 ♂♂ 3 ♀♀ 1 o ?

2 *Bhimashankar*, 1 *Lohgarh Fort*, *Poona*; 4 *Kodaikanal*, 1 *Palnis*.

These birds can be picked out from the large series by their darker colour both above and below. The three males from the *Palnis* in different plumages, differ from the others in having rufous thighs, a character not visible in any of the others of this and other races.

(to be continued)

[59]